

6GE5

Beam Power Tube

DUODECAR TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC) 6.3 $\pm$ 0.6 volts
Current at heater volts = 6.3 1.200 amp

Peak heater-cathode voltage:

Heater negative with
respect to cathode 200 max. volts
Heater positive with
respect to cathode 200^a max. volts

Direct Interelectrode Capacitances (Approx.):^b

Grid No. 1 to plate 0.34 pf
Grid No.1 to cathode & grid No.3,
grid No.2, and heater 16.0 pf
Plate to cathode & grid No.3,
grid No.2, and heater 7.0 pf

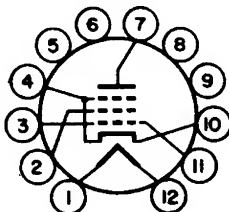
Characteristics, Class A₁ Amplifier:

Plate Voltage	60	150	250	5000	volts
Grid-No.2 Voltage	150	150	150	150	volts
Grid-No.1 Voltage	0	-22.5	-22.5	-	volts
Mu-Factor, Grid No.2 to Grid No.1	-	4.4	-	-	
Plate Resistance (Approx.)	-	-	18000	-	ohms
Transconductance	-	-	7300	-	μ mhos
Plate Current	345 ^c	-	65	-	ma
Grid-No.2 Current	27 ^c	-	1.8	-	ma
Grid-No.1 Voltage (Approx.) for plate ma. = 1	-	-	-42	-100	volts

Mechanical:

Operating Position Any
Type of Cathode Coated Unipotential
Maximum Overall Length 2.875"
Seated Length 2.250" to 2.500"
Diameter 1.437" to 1.563"
Bulb T12
Base Large-Button Duodecar 12-Pin (JEDEC No.E12-74)
Basing Designation for BOTTOM VIEW 12BJ

Pin 1-Heater
Pin 2-Grid No.2
Pin 3-Grid No.1
Pin 4-Cathode,
Grid No.3
Pin 5-Do Not Use^d
Pin 6-Do Not Use^d



Pin 7-Plate
Pin 8-Do Not Use^d
Pin 9-Do Not Use^d
Pin 10-Cathode,
Grid No.3
Pin 11-Grid No.1
Pin 12-Heater



RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.

DATA
4-63

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HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system^e

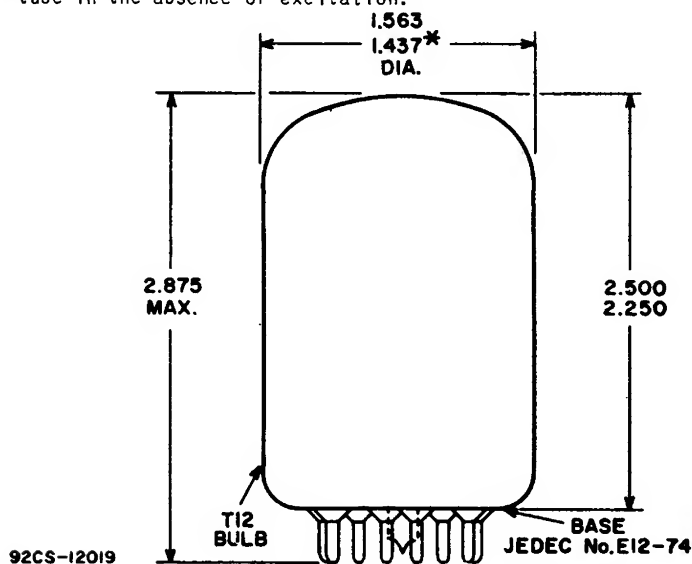
DC PLATE-SUPPLY VOLTAGE	770 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE ^f	6500 max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1500 max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE	220 max.	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE	-55 max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE	330 max.	volts
CATHODE CURRENT:		
Peak	550 max.	ma
Average	175 max.	ma
GRID-No.2 INPUT	3.5 max.	watts
PLATE DISSIPATION ^g	17.5 max.	watts
BULB TEMPERATURE (At hottest point on bulb surface)	220 max.	°C

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For grid resistor-bias operation. 1 max. megohm

- ^a The dc component must not exceed 100 volts.
- ^b Without external shield.
- ^c This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.
- ^d Socket terminals 5,6,8, and 9 should not be used as tie points.
- ^e As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.
- ^f This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.
- ^g An adequate bias resistor or other means is required to protect the tube in the absence of excitation.



ALL DIMENSIONS IN INCHES
* APPLIES TO MINIMUM DIAMETER EXCEPT IN THE AREA OF THE SEAL.

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